

**** Grant Work Plan ****

Managing Water Quality in the Delta: Establishing Science-Based Protection and Restoration of Designated Uses (12/13/11)

The U.S. EPA Region 9 is initiating an effort to assess the effectiveness of regulatory mechanisms designed to protect water quality in the San Francisco Bay/Sacramento - San Joaquin Delta Estuary (Bay Delta Estuary). The Aquatic Science Center (ASC) project will support this assessment by evaluating public input, existing information, and providing recommendations for improving water quality and identifying sustainable approaches to water quality management.

Completion of this project will support EPA's Strategic Plan Goals 2 and 4, Clean and Safe Water and Healthy Communities and Ecosystems. Specifically, project outputs will be used to achieve environmental outcomes consistent with protecting and improving water quality on a watershed basis and protecting and restoring ecosystems.

Anticipated project outputs include:

- A synthesis report of public comments regarding water quality issues in the Bay Delta Estuary based on responses to the Advanced Notice of Proposed Rulemaking (ANPR) for Water Quality Challenges in the Bay Delta Estuary.
- A consultation process for investigating water quality issue(s) in more detail including the effectiveness of Clean Water Act programs.
- Conclusions and recommended approaches to better protect water quality focused on aquatic resource designated uses. Information obtained through the public comment synthesis, consultation process, and review of existing information will be used to identify major obstacles to improving water quality problems (designated use impairments) and a set of actions for improving water quality protection and achieving long-term restoration protection of designated uses in the Bay Delta Estuary.
- A report, "Pulse of the Delta", which will present project conclusions and recommendations in a format accessible to a wide audience. The "Pulse of the Delta" will be produced in cooperation with the Central Valley Regional Water Quality Control Board.

Anticipated outcomes from this project include the following:

- Evidence over a representative period of years and hydrologic conditions of improvements in water quality and long-term environmental conditions.
- Evidence over a representative period of years and hydrologic conditions of water quality improvements on trends toward the recovery of sensitive aquatic species and of the growth, health, fecundity, and/or survival of valued aquatic species and the estuarine food web.
- Long-term improvements are anticipated to result from short-term changes including:
 - Increased understanding of public awareness and concerns about water quality in the Bay Delta Estuary through the ANPR process.
 - Prioritizing actions to improve water quality based on public input and existing information.

- Better water quality information and management through support for a regional monitoring program.
- More focused management of Clean Water Act programs including implementing recommendations for removing impairments to aquatic resource designated uses.

EPA is providing financial assistance (\$211,260) for this project to ASC under a cooperative agreement and EPA will be substantially involved with project implementation. EPA will also have substantial technical interaction with the recipient throughout the performance of the project. For example, EPA will review and approve project phases, collaborate with the recipient on the scope of work and mode of operation of the project, closely monitor the recipient's performance, approve any proposed changes to the work plan and/or budget, approve qualifications of key personnel, and review and comment on draft deliverables including meeting materials and reports.

This project will benefit from products being produced by related projects such as the Delta Regional Monitoring Program (RMP), Delta Historical Ecology, State of the Bay Report, Watershed Assessment Framework. In particular, these related projects will help identify data and information sources, potential indicators for use in water quality assessments, establish historical reference conditions, convene a stakeholder workgroup, and develop a potential assessment approach. This water quality project supports larger related efforts for the Bay Delta Estuary including activities identified in the Interim Federal Action Plan for the California Bay-Delta, but will have independent value for monitoring and assessment and complement ongoing State activities such as the Delta RMP, Delta Plan, and updates to the Water Quality Control Plan.

The project includes the following tasks that are described below in more detail:

- Task 1. Synthesis report of public comments regarding water quality issues in the Bay Delta Estuary
- Task 2. Consultation process
- Task 3. Conclusions and Recommendations Report describing findings from public comment, consultation, and existing information and recommending approaches to better protect water quality for aquatic resource designated uses.
- Task 4. Present findings and recommendations in the "Pulse of the Delta 2012"
- Task 5. Project Management

Task 1. Summarize and evaluate public comment received through the ANPR for Water Quality Issues in the Bay Delta Estuary process.

Purpose: develop an understanding of public awareness and public priorities regarding water quality issues in the Bay Delta Estuary.

- Summary of public comments including basic statistics (number of comments, from what types of commenters, how many comments per question, etc...).
- Evaluation of public comments

Approach: summarize and evaluate public comments received through the ANPR for Water Quality Issues in the Bay Delta Estuary process.

- Read and summarize all ANPR comments received.
- Categorize all ANPR comments received by general (whole ANPR), ANPR section and individual question.
- Calculate summary statistics about comments as total number of comments (ANPR, each section, each question), types of commenters (for example, government agency, interest group, individual member of the public, etc...), number of each type of commenter (ANPR, section, individual questions), etc...
- Evaluate content of public comments: identify new information, water quality issues that appear to be a public priority, additional issues not covered in the ANPR, identification of gaps in scientific knowledge and/or water quality protection by CWA programs, recommendations for CWA program or other improvements that lead to better water quality protection.
- Identify any trends, such as public priorities (indicated by comment number or some other proposed metric) regarding water quality impairments and/or recommended activities for improving water quality in the Bay Delta Estuary.

Deliverables:

- 1.1 Outline or framework describing methods for summarizing and evaluating ANPR comments submitted to EPA project officer 2 months after grant is in place.
- 1.2 Detailed outline of the public comment synthesis report submitted to EPA project officer May 25, 2011, 1 month from close of ANPR comment period.
- 1.3 First draft of public comment synthesis report submitted to EPA project officer on June 25, 2011, 2 months from close of ANPR comment period.
- 1.4 Final report submitted to EPA project officer on July 25, 2012.

Task 2. Consultation process

Purpose: Involve technical experts and stakeholders at an appropriate level to refine, further develop, and advance recommendations for actions that address one or more priority water quality issues. Consultation activities will depend on ANPR public comments and existing information regarding stressors in the Bay Delta Estuary. Options include: 1) science and/or stakeholder panel(s); 2) public meetings such as a facilitated workshop or workgroup process; and 3) other forums such as WebDialogues™, interviews, or email correspondence.

Approach: As called upon by EPA, ASC will provide additional assistance for all aspects of coordinating and facilitating a consultation process. ASC will prepare a draft factsheet that will outline the proposed consultation process. The draft factsheet will be reviewed by EPA. Once the general process is agreed on and the factsheet approved, ASC will provide support services for the consultation process as needed. At the request of EPA, ASC will develop a draft workplan for Task 2 describing specific steps. The approved workplan will guide additional assistance by ASC. The final product of Task 2 will be a

synthesis of the conclusions, recommendations, and findings of this consultation process including a review by participants before completion.

Deliverables:

The EPA R9 Project Manager will work with ASC to update the workplan timeline for Task 2 deliverables and their due dates when Task 2 is initiated.

- 2.1 Outline describing consultation process submitted to EPA project officer 1 week from EPA request to begin Task 2.
- 2.2 Draft consultation synthesis report submitted to EPA project officer 2 weeks after end of consultation process.
- 2.3 Final consultation synthesis report submitted to EPA project officer 1 month after draft consultation synthesis report submitted.

Task 3. Final Report: Conclusions and Recommendations for protecting water quality in the Bay Delta Estuary.

Purpose: Describe and summarize conclusions regarding water quality priorities, recommendations for approaches to better protect water quality, and the process that connects technical information to recommendations in a final report.

Approach: Information obtained through the public comment synthesis (Task 1), consultation process (Task 2), and review of existing information will be used to identify priorities for water quality in the Bay Delta Estuary, major obstacles to improving water quality problems (designated use impairments) and a set of recommended actions for improving water quality protection and achieving long-term sustainability of aquatic resource designated uses in the Bay Delta Estuary. The ANPR comment review and consultation processes and results will be summarized at the beginning.

This document will be written for a technically-oriented audience and serve as a “parent” document for a more broadly accessible and reader-friendly “Pulse of the Delta” publication for a wider audience (Task 4). A well-planned and rigorous developmental editing and publishing process will be utilized to ensure a high quality product. If appropriate, ASC will coordinate and administer up to two peer reviews of the document. This would include identifying the most appropriate peer review process, review questions, and reviewers, and synthesizing the review comment.

Deliverables:

- 3.1 Outline of final report submitted to EPA project officer 2 weeks after Final Consultation Synthesis Report is submitted to EPA.
- 3.2 Draft Final Report submitted to EPA project officer 6 weeks after Final Consultation Synthesis Report is submitted to EPA.
- 3.3 Final Report submitted to EPA project officer 2 weeks after draft Final Report is submitted to EPA.

Task 4. Pulse of the Delta

Purpose: Present selected conclusions and recommendations from the Final Report in a communication product that is 1) written and presented in a format that is accessible to a wide audience; 2) designed around intuitively clear and readily understood questions; and 3) coordinated with the Delta RMP communication strategy.

Approach: Choose a subset of conclusions and recommendations from the Final Report to be included in the Pulse of the Delta. Conclusions and recommendations may be chosen based on different criteria including (but not limited to) importance to public (as inferred by ANPR comments), relevance to water quality processes in action at the time of publication, type of water year, and/or others.

A well-planned and rigorous developmental editing and publishing process will be utilized to ensure a high quality product that meets the three objectives stated above under Purpose. The production and timeline of the Pulse of the Delta will be coordinated with the Delta RMP communication strategy. Production will follow the workflow model established for the Pulse of the Estuary and will be coordinated as much as possible with the Pulse of the Estuary production to avoid potential time conflicts for the production and design team. The report production process will include the following steps: plan content; develop content; review & edit content; design & print; and distribution. The distribution of the final product will be closely coordinated with the Delta RMP.

- **Content:** An initial step will be to define the topics and identify writers, editors, and advisors. ASC will develop a draft plan for defining the content in discussions with EPA, the State and Central Valley Regional Water Boards, and the Delta RMP. The content plan will define the overall content and structure, the target audience, the budget (including an updated printer quote), and a detailed schedule. An advisory group made up of four to six members of the target audience will be formed to help focus the content plan and advise the best ways to reach the intended audience. For each topic, one or two expert reviewers will focus on content accuracy. Formation and involvement of the advisory and expert review group, and its role and composition, will be done in collaboration with the EPA project manager and Central Valley Regional Boards liaison.
- **Develop content:** writers and editors will develop drafts according to a mutually acceptable schedule for content development, which incorporates content review.
- **Review & edit content:** to ensure a high standard of product quality, the development schedule will include several milestones of editorial and advisory review, including a report map, draft sample articles, revised sample articles, draft articles, and final articles. Additional editing and review may be arranged as needed, such as professional copyediting according to a style manual.
- **Design & print:** Develop and implement a detailed production schedule. The draft design and structure of the report will be developed in parallel with the content and the production schedule will be synchronized with the writing and review process. The design team will participate in setting up the report structure

by developing the report map and drafting design sketches and sample units for review. The production schedule will provide review and comment periods for the production team and advisory group and provide sufficient time for the designer to incorporate changes. A date will be set for submitting final content and graphics to the designer for developing a draft of the laid-out version of the report. The final designed pages will be proofread before going to the printer.

- The release date will mark the end of the production schedule. The DeltaPulse will be distributed electronically in a printable format and as printed hardcopies at meetings.

Deliverables:

The EPA R9 Project Manager will work with ASC and Central Valley Regional Water Quality Control to update the workplan timeline for Task 3 deliverables and their due dates when Task 3 is initiated.

- 3.1 Establish advisory group (18 months after project start)
- 3.2 Agree on final outline (21 months after contract start)
- 3.3 Draft articles including graphics (24 months after project start)
- 3.4 Editorial review comments to authors (1 week after receiving draft) and revised drafts to editor (25 months after project start)
- 3.5 Distribute revised drafts for review to advisory group (1 week after revised drafts are returned) and collect advisory group comments (26 months after project start)
- 3.6 Draft of laid-out version (27 months after project start)
- 3.7 Final proofs (28 months after project start)
- 3.8 Printed DeltaPulse (29 months after project start)

Task 5. Project Management

Purpose: Oversee project to ensure that it is conducted on time and within budget to complete identified outputs and achieve desired outcomes. Also ensure that necessary adjustments to planned activities are made based on information gained throughout project.

Approach: ASC will conduct: 1) contract administration including invoicing and reporting; 2) coordination with subcontractors including Brock Bernstein by email, telephone, or in-person meetings as needed; 3) coordination with related ASC projects for Delta RMP and Delta Historical Ecology. ASC will prepare monthly progress reports (~1- 2 pages) that include project status, current and upcoming activities, problems encountered, assistance requested and budget status. We will have monthly meetings with EPA to discuss progress, next steps and agree on necessary adjustments to the planned activities.

Deliverables:

- 5.1 Quarterly progress reports.

5.2 Monthly meetings with EPA that include ASC and EPA project managers and management

Project Team

Aquatic Science Center

Josh Collins: Project advising, reviews of project outputs and deliverables, coordinating input from outside ecologists.

Jay Davis: Project advising, reviews of project outputs and deliverables.

Letitia Grenier: technical advising and topical review, synthesis, and writing for Task 1

Rainer Hoenicke: project management oversight and strategic guidance, reviews of project outputs and deliverables; strategic partnership development including participation and presentation at IEP Coordinators and other related meetings.

Thomas Jabusch: project management, oversight, and coordination; preparation of final report and interim products; production of DeltaPulse; writing & editing; meeting coordination and co facilitation; participation and presentation at Delta water quality related meetings; coordination of advisory group formation and review process; coordination of consultation process.

Susan Klosterhaus: technical advising and topical review, synthesis, and writing for Task 1

Mike May: coordination of developmental editing and publishing process; writing & editing.

Linda Wanczyk: report design

Don Yee: technical advising and topical review, synthesis, and writing for Task 1

Brock Bernstein

Facilitation of consultation process; writing, editing, and reviews of project outputs and deliverables; preparation and reviews of meetings and related materials such as meeting agendas and minutes.

Budget Summary by Task

Task	ASC Labor Hours	Category	Bernstein	Expenses	TASK TOTAL
Task 1	13 405 3 18	Senior Scientist Scientist Editor Analyst			\$39,925
Task 2	43 238 49 89 57	Senior Scientist Scientist Designer Analyst Coordinator Subcontracts	\$24,500	\$900 Travel \$500 Supplies	\$65,901
Task 3	20 120 4	Senior Scientist Scientist Designer			\$15,204
Task 4	22 36 205 7 190	Senior Scientist Editor Scientist Analyst Designer		\$30,000 Printing	\$73,743
Task 5	20 75 75	Senior Scientist Scientist Administrator		\$182 Travel	\$16,937
TOTAL			\$24,500	\$31,582	
GRAND TOTAL:		\$211,760			